

ABSTRACT

The invention concerns a method for preparing low water uptake precipitated silicas, comprising successive steps which consist in: (a) producing an initial starter including a silicate, the silicate concentration in said starter, expressed in SiO_2 equivalent, being less than 15 g/L; (b) bringing the medium pH to a value ranging between 7 and 8 by adding an acidifying agent, (c) in the resulting medium, simultaneously adding a silicate and an acidifying agent the respective amounts of silicate and acidifying agent added in time being specifically such that, during the entire addition (1) the reaction medium pH stays between 7 and 8, and (ii) the silicon concentration in the medium, expressed in SiO_2 equivalent, stays below 35 g/L; (d) adding an acidifying agent in the medium resulting from step (c), so as to bring the medium to a pH ranging between 3 and 6.5; and (e) filtering the resulting aqueous silica dispersion, then drying the filter cake obtained at the end of the filtering step. The invention also concerns low water uptake silicas obtained by said method and their use, in particular for reinforcing silicones or polymer or elastomer matrices.